

What is claimed is:

1. A contamination purification system for purification of an area contaminated with a volatile organic compound,

which is composed of an extraction well located in the contaminated area, gas suction/exhausting unit for extracting the volatile organic compound from the extraction well, vapor-liquid separator for separating water accompanying the extracted volatile organic compound, and combustion/electric power generation unit for transforming energy produced by combusting the separated/recovered volatile organic compound into electric power, wherein the electric power produced by the combustion/electric power generation unit is used as a power for driving the contamination purification system.

2. A contamination purification system for purification of an area contaminated with a volatile organic compound,

which is composed of an air-injection well and extraction well located in at least one of the water-impermeable, water-saturated and water-unsaturated stratum all located in the contaminated area, (at the upper end when located in the water-impermeable stratum), an air injection and gas suction/exhausting unit for extracting the volatile organic compound from the extraction well, vapor-liquid separator for separating water accompanying the extracted volatile organic compound, and combustion/electric power generation unit for transforming energy produced by combusting the separated/recovered volatile organic compound into electric power, wherein the electric power produced by the combustion/electric power generation unit is used as a power for driving the contamination purification system.

3. A contamination purification system for purification of an area contaminated with a volatile organic compound,

which is composed of a water pumping-up well located in the contaminated area, suction pump for lifting water containing a volatile organic compound through the pumping-up well, decomposing unit for purifying the lifted water, deaeration unit for aerating the water purified by the decomposing unit to recover the volatile organic compound, and combustion/electric power generation unit for transforming energy produced by combusting the recovered volatile organic compound into electric power, wherein the electric power produced by the combustion/electric power generation unit is used as a power for driving the contamination purification system.

4. A contamination purification system for purification of an area contaminated with a volatile organic compound,

which is composed of an extraction well and water pumping-up well all located in the contaminated area, gas suction/exhausting unit for extracting the volatile organic compound from the extraction well, vapor-liquid separator for separating water accompanying the extracted volatile organic compound, suction pump for lifting water containing a volatile organic compound through the pumping-up well, decomposing unit for purifying the lifted water, deaeration unit for aerating the water purified by the decomposing unit to recover the volatile organic compound, and combustion/electric power generation unit for transforming energy produced by combusting the separated/recovered volatile organic compound into electric power, wherein the electric power produced by the combustion/electric power generation unit is used as a power for driving the contamination purification system.

5. A contamination purification system for purification of an area contaminated with a volatile organic compound,

which is composed of an air-injection well, extraction well and water pumping-up well all located in at least one of the water-impermeable, water-saturated and water-unsaturated stratum in the contamination area (at the upper end when located in the water-impermeable stratum), an air injection and gas suction/exhausting unit for extracting the volatile organic compound from the extraction well, vapor-liquid separator for separating water accompanying the extracted volatile organic compound, suction pump for lifting water containing a volatile organic compound through the pumping-up well, decomposing unit for purifying the lifted water, deaeration unit for aerating the water purified by the decomposing unit to recover the volatile organic compound, and combustion/electric power generation unit for transforming energy produced by combusting the volatile organic compound, recovered by the vapor-liquid separator and deaeration unit, into electric power, wherein the electric power produced by the combustion/electric power generation unit is used as a power for driving the contamination purification system.

6. The contamination purification system of one of Claims 1 to 5, wherein said combustion/electric power generation unit uses a gas turbine.

7. The contamination purification system of one of Claims 3 to 5, wherein said decomposing unit decomposes the lifted water in the presence of ultraviolet ray or photocatalyst.